

# Eagle Commuter Rail

## Denver, Colorado

### Final Design

(Based upon information received by FTA in November 2010)

Summary Description	
<b>Proposed Project:</b>	Electrified Commuter Rail 30.2 Miles, 13 Stations
<b>Total Capital Cost (\$YOE):</b>	\$2,043.14 Million (includes \$484.8 million in finance charges)
<b>Section 5309 New Starts Share (\$YOE):</b>	\$1,030.45 Million (50.4%)
<b>Annual Forecast Year Operating Cost:</b>	\$115.00 Million
<b>Ridership Forecast (2030):</b>	57,500 Average Weekday Boardings 15,100 Daily New Riders
<b>Opening Year Ridership Forecast (2016):</b>	37,700 Average Weekday Boardings
<b>Overall Project Rating:</b>	Medium
<b>Project Justification Rating:</b>	Medium
<b>Local Financial Commitment Rating:</b>	Medium

**Project Description:** The Denver Regional Transportation District (RTD) is planning the East and Gold Line Enterprise (Eagle) Commuter Rail project, which consists of two lines: the East Corridor from Denver International Airport to downtown Denver at Denver Union Station and the Gold Line from Denver Union Station westward to Ward Road in Wheat Ridge. Six stations would be constructed in the East Corridor and seven along the Gold Line. Forty-four electric multiple unit vehicles would be purchased. When completed, the Eagle Commuter Rail project would connect Downtown Denver with the communities of Adams, Arvada and Wheat Ridge to the west and North Park Hill, Stapleton, Aurora/Fitzsimons, Montebello, Gateway and Denver International Airport to the east. Service is proposed to operate every 15 minutes in each direction on both lines all day.

**Project Purpose:** The East Corridor contains a limited number of transportation thoroughfares in the east-west direction with Interstate 70 being the primary thoroughfare. Existing arterial streets traveling through the corridor are not continuous, making local bus service connecting all consecutive neighborhoods infeasible. The East Corridor project will provide an additional transportation option in the corridor. Currently there is also a lack of continuous street connections between the Gold Line corridor and downtown Denver, resulting in traffic using north-south arterials and Interstates 70 and 25 to access downtown Denver. Travel time by transit is currently 20 minutes by express bus on I-70 and I-25 from Ward Road to downtown Denver; however, this time can vary by as much as eight minutes due to congestion. Other major east to west arterials do not provide, and are not planned to provide, direct connections into downtown over the next 20 years. The Gold Line is intended to provide direct, fast and frequent service as a convenient alternative to automobile use.

**Project Development History, Status and Next Steps:** The East Corridor and Gold Line were approved into preliminary engineering in April 2009 as separate projects. Both projects received Records of Decision in November 2009 and approval to enter final design in April 2010. Because RTD will be managing the East Corridor and Gold Line as a single project, FTA agreed to consider them for a single Full Funding Grant Agreement (FFGA) as the Eagle Commuter Rail project. RTD is utilizing a design-build-finance-operate-maintain project delivery method for the project. A Concessionaire Team composed of engineering, construction, construction management, financial advisors and vehicle firms are designing and constructing the project, helping to finance the project, and providing an equity stake. RTD anticipates receiving an FFGA in May 2011.

## Locally Proposed Financial Plan

<u>Source of Funds</u>	<u>Total Funds (\$million)</u>	<u>Percent of Total</u>
<b>Federal:</b>		
Section 5309 New Starts	\$1,030.45	50.4%
FHWA Flexible Funds (CMAQ)	\$62.10	3.0%
<b>Local:</b>		
Bond Proceeds	\$48.24	2.4%
Sales & Use Tax	\$374.25	18.3%
Concessionaire Financing-Private Equity and Debt	\$487.81	23.9%
Contributions from the City of Aurora, City & County of Denver, Adams County, Jefferson County, City of Arvada, City of Wheat Ridge	\$40.30	2.0%
<b>Total:</b>	<b>\$2,043.14</b>	100.0%

**NOTE:** The financial plan reflected in this table has been developed by the project sponsor and does not reflect a commitment by DOT or FTA. The sum of the figures may differ from the total as listed due to rounding.

**CO Denver, Eagle Commuter Rail**  
**FY2012 Financial Assessment Summary prepared November 2010**

<b>Factor</b>	<b>Rating</b>	<b>Comments</b>
<b>Local Financial Commitment Rating</b>	<b>Medium</b>	
<b>Non-Section 5309 New Starts Share (20% of summary financial rating)</b>	<b>Medium</b>	The New Starts share of the project is 50.4 percent.
<b>Project Capital Financial Plan (50% of summary financial rating)</b>	<b>Medium</b>	
Capital Condition (25% of capital plan rating)	Medium	The average age of RTD's bus fleet is 6.7 years, in line with the industry average. The most recent bond ratings, issued in 2010, are as follows: Moody's Investors Service Aa2, Fitch's AA and Standard & Poor's Corporation AA+.
Commitment of Funds (25% of capital plan rating)	Medium-High	Almost 90 percent of the non-Section 5309 New Starts funds are committed. Sources of funds include FHWA Congestion Mitigation and Air Quality Improvement (CMAQ) funds, sales and use tax revenues, bond proceeds, other local funds, and concessionaire financing-private equity and debt.
Capital Cost Estimates, Assumptions and Financial Capacity (50% of capital plan rating)	Medium-Low	Revenue assumptions around the FHWA Congestion Mitigation and Air Quality Improvement (CMAQ) funds, sales and use tax revenues, bond proceeds, other local funds, and concessionaire financing-private equity and debt are consistent with historical data. 5309 New Starts funding is optimistic between 2010 and 2017. The capital cost estimate is considered reasonable. The financial plan shows that RTD has the financial capacity to cover cost increases or funding shortfalls up to nine percent of estimated project costs.
<b>Project Operating Financial Plan (30% of summary financial rating)</b>	<b>Medium</b>	
Operating Condition (25% of operating plan rating)	Medium	RTD's current ratio of assets to liabilities as reported in its most recent audited financial statement is 2.3, but it has made minor service cutbacks the last two years.
Commitment of Funds (25% of operating plan rating)	High	100 percent of operating funding is committed. The main sources are fare revenue and sales and use tax revenue.
O&M Cost Estimates, Assumptions, and Financial Capacity (50% of operating plan rating)	Medium-Low	Assumed growth in operating expenses is optimistic compared to historical experience. Assumed farebox collections and sales tax revenues are consistent with historical experience.

# Eagle Commuter Rail

## Denver, Colorado

### Final Design

(Land Use and Economic Development Rating based upon Information accepted by FTA in November 2009)

#### ***LAND USE RATING: Medium-Low***

The land use rating reflects the population and employment densities within ½-mile of proposed station areas.

##### **East Line**

- Existing land uses in the new station areas include primarily industrial with some residential and commercial uses. Average population density across new station areas is 1,100 persons per square mile. Total employment served is 121,400 (including 102,700 in the Denver CBD). In the CBD, the ratio of parking spaces to employees is 0.44. Parking costs average \$7 per day in the Denver CBD, and generally parking is free and available in other station areas except Denver International Airport (DIA) where parking costs \$9 to \$27 per day.
- Pedestrian facilities are present in the established neighborhoods in the two station areas closest to the Denver CBD but few sidewalks exist in other station areas. Despite its proximity to the Stapleton Airport traditional neighborhood redevelopment area, a recently-developed shopping center in the Central Park Station area is largely auto-oriented with low-rise buildings and large parking lots.

##### **Gold Line**

- Average population density in the Gold Line Station areas is 2,400 persons per square mile. Total employment served is 114,900 (including 102,700 in the Denver CBD). In the Denver CBD, the ratio of parking spaces to employees is 0.44, and generally parking is free and available in other station areas.
- Existing land uses in station areas include primarily industrial with some areas of low- to moderate-density, single-family residential and commercial uses. Pedestrian facilities are limited, except in the few established residential neighborhoods and the Olde Town Arvada existing historic town center.

## ***ECONOMIC DEVELOPMENT RATING: Medium-High***

### **Transit-Supportive Plans and Policies: Medium-High**

(50 percent of Economic Development Rating)

#### **East Line**

- Land use in the East Corridor is controlled by the City and County of Denver and City of Aurora. Area plans exist for half the station areas, and planning is underway for the other proposed stations. The current area and sub-area plans generally encourage increased development and transit-oriented projects. Multiple regional plans support increasing density in urban centers, and Denver Union Station (DUS) is undergoing development into a mixed-use transportation hub with 1.3 million sq. ft. of development planned.
- Existing zoning at the stations closest to the CBD allows low to moderate density of seven to 15 units per acre. Denver has established several residential and commercial mixed-use zones, as well as a Transit-Mixed Use zone (T-MU-30). An area zoned T-MU-30, permitting FAR of 5.0 and parking reductions of 25 percent, is at the core of the DUS area, and the Central Park and 40<sup>th</sup>/Airport Station areas include some mixed-use zones. The City of Aurora has established zoning with a maximum FAR for the core of a city center subarea of 1.4, and is providing guidance on transit-oriented character.

#### **Gold Line**

- Land use in the Gold Line corridor is controlled by the City and County of Denver, Adams County, City of Arvada, and City of Wheat Ridge. Neighborhood transit-oriented development (TOD) plans have been completed or are underway for each of the seven station areas, and will serve as the basis for rezoning and other improvements. All current area and sub-area community land use plans contain objectives that explicitly support the transit project and that generally encourage transit-oriented projects, pedestrian orientation, and dense, mixed-use patterns of development.
- Multiple regional plans support increasing density in urban centers, and Denver Union Station is undergoing development into a mixed-use transportation hub with 1.3 million square feet of new development planned. Incentives to promote corridor development under consideration include density bonuses, reduced parking requirements, tax-increment financing, and urban renewal districts.
- Existing zoning ordinances permit low to moderate density residential development, ranging from 6 to 20 units per acre. Denver has established a Transit-Mixed Use zone permitting a floor area ratio of 5.0 and parking reductions of 25 percent, which is at the core of the DUS area. In each of the jurisdictions, rezoning efforts have been initiated or are planned to support station area planning efforts, which will include higher-density and mixed-use districts and improved transit-oriented character.

### **Performance and Impacts of Policies: Medium-High**

(50 percent of Economic Development Rating)

#### **East Line**

- Extensive development has occurred in the past decade near DUS, and examples of TOD are increasing in other existing station areas in the region. Development opportunities at the 40<sup>th</sup>/40<sup>th</sup> and Colorado Stations are primarily infill or adaptive reuse projects, and several residential and retail projects have been proposed at the 40<sup>th</sup>/40<sup>th</sup> Station.
- Three station areas in the corridor have significant undeveloped or underutilized land (Central Park, Peoria, and 40<sup>th</sup>/Airport). Large-scale redevelopment plans of more than 4,000 acres each, including residential and commercial development, are planned and underway in the areas that include the Central Park and 40<sup>th</sup>/Airport Stations. The stations also benefit from proximity to freeways which may aid marketability.
- DIA is forecast to add significant employment and more than double the number of enplanements by 2030.

#### **Gold Line**

- In three of the proposed station areas along the Gold Line Corridor, new residential and retail development and redevelopment has recently been completed.
- Significant opportunities for development and redevelopment exist at four station areas with 50 percent or more undeveloped or underutilized land (Pecos, Federal, Arvada Ridge, and Ward). Limitations exist at the Pecos Station area that falls within historical landfill areas so new development would require mitigation. The three other stations in the corridor have more potential for infill development and less vacant land. They also benefit from proximity to freeways which may aid marketability. Improved connections between established residential areas in the Sheridan and 38<sup>th</sup> Station areas may support transit demand, although the 38<sup>th</sup> Street Station area is bisected by rail yards with only one current pedestrian connection.

